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| MARTIN & FERRARO, LLP 1557 LAKE O'PINES STREET, NE HARTSVILLE, OH 44632 | | | EXAMINER SONNETT, KATHLEEN C | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/706,715

Applicant(s)

SHIPP, JOHN I.

Examiner

KATHLEEN SONNETT

Art Unit

3731

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 and 27-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 and 27-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. **Claims 1-24 and 27-36** are rejected under 35 U.S.C. 103(a) as being unpatentable over Shipp et al. (US 5,858,018; "Shipp '018") in view of Crainich (US 6,226,843) and Shipp (US 6,290,575; "Shipp '575"). Shipp '018 discloses a surgical ligation clip for ligating a fluid carrying structure, the clip comprising a mid-longitudinal axis, a distal and proximal end, and a length between the end, an upper support member (22) oriented generally along the mid-longitudinal axis and a lower support member (20) oriented generally along the mid-longitudinal axis of the clip and a connector (24) at the proximal end of the clip, the connector joining the upper and lower support members, the clip being formed of a single piece of wire (fig. 4) having a first and second free end, the free end of the lower support member terminating proximate the proximal end (fig. 2b; within coil). The connector has a maximum width perpendicular to the mid-longitudinal axis in a third plane generally parallel to the mid-longitudinal axis and a maximum connector height perpendicular to the mid-longitudinal axis which is equal to the maximum clip height. At least one of the upper and lower support members has a width at their distal ends perpendicular to the mid-longitudinal axis in a second plane generally parallel to the mid-longitudinal axis that is greater than the maximum width of the connector (fig. 2b; fig. 4b, and 10b, see clip) in a first plane, the two planes generally parallel to each other. The distal end of the clip has a distal height parallel to the maximum clip height and the proximal end of the clip

has a proximal width parallel to the maximum clip width wherein the distal height and proximal width are both twice the thickness of the wire.

3. Regarding claims 12 and 13, Shipp '018 discloses a clip comprising a mid-longitudinal axis, a distal and proximal end, and a length between ends, an upper support member and lower support member both being oriented generally along the mid-longitudinal axis of the clip between the ends of the clip and a connector. Shipp '018 discloses a connector (24) at the proximal end of the clip that joins the upper and lower support members, the clip being formed of a single piece of material having a first and second free end, one of the free ends terminating proximate the proximal end. At least one of the free ends faces in a direction that is transverse to the mid-longitudinal axis of the clip (end that terminates in coil).

4. Shipp '018 fails to disclose that the second free end terminates proximal to the connector since the upper support member does not loop back around like the lower support member. However, Crainich teaches that a well known alternative to having a lower support with two legs and an upper support with a single leg (see fig. 9) is a clip with lower and upper supports that both have two parallel legs generally aligned to one another (fig. 11). Since Shipp '018 discloses that the clip is manufactured by a single piece of wire and Crainich teaches that the configuration shown in fig. 11 is a known alternative to the configuration shown in fig. 9, it would have been obvious to one skilled in the art to have modified the device of Shipp '018 to extend the upper support so that it can loop around and form a two leg upper support as is well known in the art of spring clips. It would have been obvious to one skilled in the art to try the configuration taught by Crainich for the device of Shipp et al. because a person of ordinary skill has good reason to pursue the known options within his technical grasp. If this leads to the anticipated success, it is likely the product not of innovation but of ordinary skill and common sense.

5. Shipp '018 also fails to disclose that the upper and lower support members have maximum widths adjacent the distal and widths less than the maximum widths over the majority of their lengths between the proximal and distal ends. However, Shipp '575 discloses that such enlarged distal ends for upper and lower support members are well known in the art of surgical ligation clips (fig. 3 and 4). It would have been obvious to one skilled in the art to include the enlarged ends taught by Shipp '575 on the device of Shipp '018 because a person of ordinary skill has good reason to pursue the known options within his technical grasp. If this leads to the anticipated success, it is likely the product not of innovation but of ordinary skill and common sense.
6. Regarding claim 2, see col. 2 ll. 39-42 of Shipp '018 which indicates that titanium wire of 0.75 mm can be used to manufacture the clip.
7. Regarding claims 3, 4, 16, and 17, see col. 4 ll. 4-7 of Shipp '018.
8. Regarding claims 9 and 22, the longitudinal members extend along a substantial portion of the length of the clip.
9. Regarding claims 10, 11, 23, and 24, see col. 10, ll. 12-21 of Shipp '018.
10. Regarding claims 5, 6, 18, and 19, the connector includes a coil having an interior, the free end of the lower support member of the wire terminating proximate the interior of the coil (fig. 2b of Shipp '018). As discussed above, Crainich teaches adding another leg for the upper support member so that it lies on top of the lower support member in a configuration similar to that shown in fig. 11 of Crainich. It would have been obvious to one skilled in the art to have put the free end of the upper support proximate the interior of the coil because it is well known in the art of wire spring clips to include both free ends of the wire within the coil in order to prevent material from catching on the free ends of the wire.

11. Regarding claims 7 and 20, Crainich teaches upper and lower support members each having two parallel longitudinal members with a recess therebetween, the upper support members generally overlying the lower support members. The lower support member includes a loop at its distal and it would have been obvious to similarly construct the upper support member to achieve the configuration taught by Crainich in fig. 11.

12. Regarding claims 8, 21, 28, 29, 32, and 33, each support member is formed of first and second longitudinal legs with a recess therebetween, which extend generally parallel to one another from the connector. The legs of the upper support member generally overlie the legs of the lower support member (see fig. 11 of Crainich).

13. Regarding claims 13 and 15, the ends face a direction generally transverse to the mid-longitudinal axis of the clip of the device of Shipp '018 as modified by Crainich. As discussed above, Shipp '018 only includes one free end within the coil but it would have been obvious, after attaining the configuration taught by Crainich, to place the other free end of the clip within the coil as well to avoid This is considered away from the proximal end of the clip. That is, away from the proximal end does not necessarily mean towards the distal end, rather any direction besides toward the proximal end.

14. Regarding claims 27 and 31, as discussed above, Shipp '575 teaches enlarging the upper and lower support members adjacent the distal end of the clip.

15. Regarding claims 28, 29, 32, and 33, the upper and lower support members are formed of first and second legs extending parallel to one another as taught by Crainich.

16. Regarding claims 30 and 34, to better see the structure of the clip, applicant is directed to US 5,593,414. The disclosure of Shipp et al. '018 references this clip. (col. 1, line 66-col. 2 ll. 2; Applier to be used with clip of US application no. 08/111,634, now abandoned, of which US

5,593,414 is a continuation). Fig. 5 of '414 shows the width of the coil being less than that of the distal end of the lower support member.

17. Regarding claim 35, the clip has a minimum clip width perpendicular to the maximum clip length and height, and the connector has a minimum connector width in the third plane, and the minimum connector width is equal to the minimum clip width. As noted above, Crainich teaches including two legs so that the both supports will be the same thickness. In this case, the connector width is equal to the minimum clip width.

18. Regarding claim 36, the connector height is equal to the maximum clip height (best shown in fig. 6 of Shipp: US 5,593,414).

19. Regarding claim 14, Shipp '018 in view of Crainich and Shipp '575 fails to disclose one of the free ends facing generally toward the distal end. However, applicant has not disclosed any advantage gained, purpose served, or problem solved by having a free end facing toward the distal end as opposed to facing a direction transverse to the mid-longitudinal axis of the clip. It appears that the claimed invention and the invention of Shipp '018 in view of Crainich and Shipp '575 would work equally well with the ends facing in either of these directions since they are protected by the coil. Therefore, such a configuration can be considered a design consideration that fails to patentably distinguish the invention of claim 14 from the prior art of Shipp '018 in view of Crainich and Shipp '575.

Response to Arguments

20. Applicant's amendments to the claims have overcome the previously presented rejections over Chapman et al. (US 1,332,287). It is noted that, in the previous office action mailed 7/15/2008, the references to Chapman et al. in par. 12 of the action (p. 5) should have read "Shipp et al." (now being referred to as Shipp '018) and have been corrected in this action.

21. Applicant's arguments with respect to the rejections over Shipp '018 in view of Crainich have been considered but are moot in view of the new ground(s) of rejection in further view of Shipp '575. In response to applicant's arguments against the references of Ship '018, Crainich, and Shipp '575 individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

22. Applicant argues that the amendments overcome the previously presented rejections of the claims over Shipp '018 in view of Crainich. This is not found persuasive. Shipp '575 has been added to the rejection of all of the claims since the independent claims now include that the upper and lower connectors have a distal width that is greater than the width of the majority of the length of the clip between the distal and proximal ends. The remaining claimed features are disclosed by Shipp '018 in view of Crainich and Shipp '575 as detailed above in the rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KATHLEEN SONNETT whose telephone number is (571)272-5576. The examiner can normally be reached on 7:30-5:00, M-F, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Todd Manahan can be reached on 571-272-4713. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3731

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KCS 1/15/2009

/Todd E Manahan/

Supervisory Patent Examiner, Art Unit 3731